

The background of the cover is a photograph of a snowy mountain landscape. In the upper left, a large orange parachute is suspended in the air. Below it, a small figure of a person is visible on the snowy slope. The foreground is filled with a dense line of dark evergreen trees. The sky is a clear, bright blue.

SURVIVOR

Magazine

Winter 2003
Volume 4, Issue 1

Articles In This Issue:

Winter Evasion

By MSgt (s) Stephen Knecht

354th OSS/OSKL Eielson AFB Alaska

The Raid On Tokyo

By TSgt(s) Richard Dickerson

27th OSS/INA Cannon AFB NM

Survival Library

By Sue Arvin

336th TRSS/TSDD Fairchild AFB WA

Clean Water

By Allen Erickson

Joint Personnel Recovery Agency

Parody of “If”

MI-9

Survival Tips

By SURVIVOR Staff



From The Editor:

Here is another issue of the SURVIVOR. We hope you have enjoyed the other issues as much as we have enjoyed putting them out. We have had a huge number of positive responses, and continue to want to improve this magazine. To make it better, **we need your articles** and suggestions on what could be added to make this periodical more appealing.

It's our readers that make this magazine what it is. If you want to see something added or an article on a specific subject, you should write it, others are probably interested in the same subject. Please take the time to write a short article and send it to us. Thank you for your support.

You are now able to download color issues of the SURVIVOR at the following site:
www2.cannon.af.mil/og/oss/Life_Support/index.htm

STAFF

MSgt Bryan Kasmenn

27 OSS/OSTL Cannon AFB NM

bryan.kasmenn@cannon.af.mil

Editor in Chief

Dee Smith

336 TRSS/TSDD Fairchild AFB WA

darzell.smith@fairchild.af.mil

Technical Editor

Survivor's Quote

“We stood therefore about 10 minutes, too breathless to speak and in a lather of sweat in spite of the sub-zero temperature. The snow still came down, thinning a little now, and there was a moaning wind through the trees that made the gaunt branches shake and creak miserably. Like hunted animals we were all straining our ears for sounds of the chase. In all our minds was the thought of dogs. But there was only the wind, the falling snow and the stirring trees.”

Slavomir Rawicz

Escaped a Soviet Labor Camp and evaded across Siberia

Author of The Long Walk

This publication in no way represents the doctrine, opinion, or policies of the United States Air Force or the 27th Fighter Wing. Information provided in the following articles is the responsibility of the author.

Disagreements with information contained in this publication should be directed accordingly.

WINTER EVASION

MSgt (s) Stephen D. Knecht
354th OSS/OSKL Eielson AFB Alaska

Evading in North Korea or Bosnia during the winter months greatly compounds the problems already facing the survivor. Attempting to stay warm and dry while not compromising his or her security takes constant vigilance. The following information and techniques are provided to assist aircrew members satisfy their survival needs when evading in the winter.



Pre-mission planning for the possibility of an evasion episode is an absolute must if an evader expects to survive during winter. Choosing quality clothing,

having a well stocked personal survival kit (PSK), and knowing where and what survival equipment is available should be standard prior to any mission. Items to include in a winter PSK should provide heat both externally and internally, suggested items include; hand warmers, tinder (cotton balls soaked in Vaseline), matches in water proof container, metal match, beef jerky, pepperoni sticks, candy and cereal bars to name a few. Aircrew members need to know in advance what initial actions will be accomplished once on the ground. Selecting critical items such as sleeping bag, main ruck sack and auxiliary kit (commonly known as the hit and run kit) can be the determining factor if long-term survival is possible. Applying good evasion movement techniques while trying to stay dry is difficult. Whenever possible, an evader should select a secure hole up spot and stay put until rescued or circumstances force the survivor to move.

Prevention of cold injuries is a constant dilemma for the evader. Dehydration, hypothermia and frostbite are the greatest environmental injuries evaders may encounter. Dehydration will be accelerated in the cold, the colder the ambient air temperature and the higher the elevation, the dryer the air. Under these conditions a survivor can lose up to one gallon of water a day through normal

respiration¹. Other causes include excessive sweating and cold diuresis (the excessive discharge of urine induced by the cold). Symptoms include yellow urine, irritability and headache. Evaders should attempt to drink as much water as possible, one cup of water every hour will normally prevent dehydration.

Proper water consumption is based on availability. Snow will most likely be the number one source of water, but can be difficult to utilize. Eating snow will lower one's body temperature, burn excessive calories, and may cause frostbite in the mouth. One of the best ways to melt snow as an evader is body heat. By placing a small amount of snow (one or two handfuls) in a plastic bag, and placing the bag between the two layers of clothing closest to the skin, body heat will melt and warm the water. After this snow is melted, place another one or two handfuls of snow in the bag and re-warm.

Continue this process until the desired amount of water is procured. A common mistake made, when trying to melt snow via body heat, is to fill the water bag completely with snow, this technique will not work. The large quantity of snow in the bag will act as an insulator from body heat, preventing proper water procurement.



An evader who is dehydrated will be more sensitive to the cold and their decision making process can be hampered, increasing the odds for capture or further cold injuries such as hypothermia. Hypothermia is the lowering of the body's core temperature. Wind, cool temperatures and moisture either in the form of rain, snow or sweat will induce hypothermia.

¹Wilkerson, James A. MD: *Medicine for Mountaineering*, The Mountaineers, Seattle, 1985. page 31

Most hypothermia deaths occur between 30-50 degrees Fahrenheit². Symptoms include cold feeling, intense shivering, slow reactions, clumsiness and mental confusion. All of which reduce the evader's chance of success. Shivering intensely, while trying to hole up or while moving, will prevent the evader from maintaining a stealthy evasion posture.



Hypothermia should be treated at the earliest onset. Treatment of severe hypothermia is difficult if not impossible while under evasion conditions. Treatment is best accomplished by getting out of the environment into an evasion shelter, eliminating heat loss by removing wet clothing, (heat loss will occur twenty-five times faster when wet then dry) and finally re-warming. Drinking warm fluids, eating quick energy food and placing heat next to specific areas of the body, may accomplish re-warming. Heat packs or hand warmers placed on the sides of the neck, under the arms, in the groin area and on the lower portion of the back near the kidneys will warm the evader.

An additional way to treat mild hypothermia is by using a poncho and Trioxane (compressed ration heating fuel), if available. The evader sits in a fashion with his knees in an upright position and the poncho tucked under his feet and buttocks. By burning the fuel under the poncho the evader can warm himself

without building an evasion fire. The fuel will burn for approximately 15-20 minutes with little smell and no smoke as long as it is on a platform. Extreme caution should be taken to prevent breathing the toxic fumes created by the burning Trioxane by ensuring the evader's head is out of the poncho. Maintaining proper caloric intake and dressing smartly for the cold will help prevent hypothermia from occurring.

A hypothermic individual is very susceptible to frostbite. The wind, temperature and moisture also cause frostbite as well as restrictive clothing and direct contact to cold soaked metals. There are two types to be aware of, superficial and deep. Superficial symptoms include tingling or stinging sensation followed by numbing. The skin turns red, then waxy white and feels wooden with the outer portion hard and the underlying tissue soft. Movement of the frozen part may also be difficult. Attempting to communicate with rescue forces can be stifled when cold soaked hands will not function properly to operate radio, GPS and signal devices.

Treatment, under evasion conditions, is best accomplished with body heat. Superficial injuries can take as long as 30-60 minutes to completely thaw, and care should be taken to prevent only partial thawing³. Once thawing is complete, treat the injury as if it were a second-degree burn.

Deep frostbite looks the same as superficial. The difference is the muscle tissue and possibly the bone and marrow will be frozen. This injury should be left frozen and survivors should protect from further freezing. Attempting to thaw deep frostbite will further



complicate the evader's existing problems due to the intense pain experienced while thawing and the inability to use affected parts once thawed. Prevention is far better than treatment. Warm body parts as soon as cold soaking is identified.

Injuries due to bailout, ejection or aircraft ditching will be compounded due to the cold. Burns, bleeding and breaks, particularly compound fractures, all require extra attention. Special

²Forgey, William W. MD: *Wilderness Medicine*, ICS Books, Merrillville Indiana, 1987. page 63

³Wilkerson, James A. MD: *Medicine for Mountaineering*, The Mountaineers, Seattle, 1985. page 215

care should be given to prevent freezing due to lack of circulation, exposed muscle tissue or bone ends.

Prevention of hypothermia and frostbite can be accomplished by understanding the five ways survivors lose body heat. 1. Convection. Convection is the wind pulling heat away from your body. Ejection and bailout will create a great amount of heat loss through convection, as well as high winds when on the ground. 2. Conduction. Conduction will occur when body parts have direct contact with cold objects. Sitting on the ground without any insulation between the evader will pull large quantities of heat away from the body. 3. Evaporation. Heat loss through evaporation will occur when clothing becomes wet, either through perception or sweating. 4. Radiation. Seventy-five percent of the heat that the body produces can be radiated from the neck and head if unprotected. 5. Respiration. Heat loss occurs through respiration when evaders constantly breathe in cold air. All five areas of heat loss can be prevented by properly utilizing an evader's three lines of defense; clothing, shelter and fire.



Protective clothing for the cold should be addressed well before the mission for any crewmember. Besides the normal flight clothing worn, recommended items would include: winter weight flight suit, winter weight flight jacket, extreme cold flying trousers and Long Johns (maybe more than one set of Long Johns depending on the severity of the cold). When wearing Long Johns it is beneficial to wear them next to the skin instead of over a cotton T-shirt, cotton will not allow perspiration to transfer away from skin, increasing heat loss. Other items to have available include; Polypropylene/wool socks and headgear, gauntlets, scarf, wool gloves and mittens with Thermax liners.

While some of these items may not be worn in flight, such as wool gloves and mittens, they should be packed in survival kits, vests or in available pockets in flight clothing. The benefit of wool is that it will retain eighty percent of its insulation value when wet and may be of value when unable to dry items that consistently become soaked⁴. Aircrews flying in fighter aircraft should remove g-suit and Combat Edge vest once on the ground to increase the insulation value of their flight clothing. G-suit and vest permitted to stay in place will restrict circulation.

Proper footwear is also very valuable to the evader. Boots such as insulated Danner or Matherhorn's, Mukluks with an additional liner inside the wool bootie, possibly a Sorrel liner and Quality Sorrels approved for flight will protect the evader's feet. Insulated leather boots with a Gortex lining will protect the evader's feet in mild temperatures, while Mukluks and Sorrels will protect well below zero. Special care should be taken to prevent boots from becoming wet. All seams on leather boots should be sealed with bee's wax. Applying Scotch Guard or Campdri can make mukluks, although not waterproof, more water repellent. Proper use of clothing in the winter is essential while evading, using the loose and layered principal as well as dressing down when moving and re-donning dry clothing when holed up, are keys to clothing maintenance.

Depending on the severity of the weather, clothing may not be adequate enough to protect the evader; therefore, an evasion shelter may have to be utilized. Natural shelters such as tree wells and snow caves with the aid of a sleeping bag can greatly enhance the survivability of the evader. When down sleeping bags are used, survivors should prevent the down from becoming wet. Wet down has zero insulation value.

If sleeping bags are not available to potential survivors, items such as one man life rafts, ponchos, poncho liners and Gortex bivy sacks will provide protection in mild weather.

Snow caves when feasible to construct will also protect an evader from the elements. Care should be taken when constructing snow caves to prevent the evader from becoming soaked due to increased perspiration and direct body contact with the snow.

⁴Wilkerson, James A. MD: *Hypothermia, Frostbite and other Cold Injuries*, The Mountaineers, Seattle, 1986. page 21

The last line of defense is fire craft. Building a fire without compromising the evader's location, is extremely difficult. If a fire is warranted, the following considerations should be incorporated. The fire should be built on a platform large enough to contain the whole fire. Burning wood and coals allowed to drop in the snow will create unwanted smoke and steam. The fire should be kept small and burn time should be of short duration to prevent detection. Fires should be constructed under heavy vegetation and during ideal times to disguise smoke and flame. Preferred times for fire construction include dusk and dawn and snowy, rainy or foggy days. Smoke can be reduced if not eliminated by using very thin dry material. Hardwoods are preferred over evergreen, but if conifers are the only resource available, the thin dead branches from around the base of the trees should be used. If time permits as much bark as possible should be removed from the wood to reduce smoke. Also a hot burning fire will produce less smoke than one that has been allowed to die down, this can be accomplished by keeping the fire concentrated and adding more fuel when needed.

Ideally, the decision to make a fire should be made before and evader becomes too cold to construct one properly. Preparing materials beforehand and keeping them dry and readily available along with having man-made tinder's such as Trioxane and cotton balls soaked in Vaseline will reduce construction time and increase the probability of success.

Properly using and evaders three lines of defense against the environment will greatly reduce the amount of energy expended to produce heat, allowing greater conservation of food sources. Satisfying an evader's food requirement can be difficult to accomplish in the winter.

Most individuals require approximately 1800 to 3000 calories a day, an evaders need will be much greater⁵. Procuring enough plant and animal life to satisfy the required caloric intake will take a great amount of time and energy. Plants that may be available include; cattail and water lily root, young buds on trees, frozen berries

⁵Wilkerson, James A. MD: *Hypothermia, Frostbite and other Cold Injuries*, The Mountaineers, Seattle, 1986. page 33



and inner bark of any tree. Farm root crops may also be available; caution should be exercised when procuring domestic food sources. Available animal life can include small mammals, birds and fish.

Procuring animal life as an evader has its own problems. Snaring small game requires evaders to frequent snares, possibly leaving a trail. Sufficiently marking snares to be found once in place, while preventing the enemy from identifying a person's presence in the area may also be difficult. Finding open water sources to fish, can be tough to do. High-energy rations in survival kits supplemented with other food items in PSKs already mentioned, can greatly reduce the need to forage, preventing unnecessary energy expenditure.

Proper care and use of equipment in the winter is also vital. Evaders should pay attention where they place survival equipment when accomplishing inventory. Placing items on the snow will most likely result in lost equipment. Having items readily available for rescue forces is very important, during inventory signaling devices should be prepped and propositioned for immediate use, for example, the MK-13 flare cap is very difficult to remove when cold soaked. Slice cap sides during preparation of flare to facilitate easy removal when needed. Battery conservation and keeping all electronic devices warm will be a continuous need. Place all devices in inner layers of clothing to keep as warm and dry as possible. When using electronic

devices, only expose them to the environment when necessary, prolonged exposure to the cold will quickly drain battery life and may limit usability due to cold soaking of buttons, switches and flexible parts such as GPS function keys and survival radio earphones.

Winter evasion is mentally demanding and requires a strong will to survive.

Possessing a desire to live despite seemingly insurmountable mental and physical conditions is an absolute must for any evader. All potential evaders should examine their own will to survive to determine if they have what it takes. A person with a positive mental attitude, strong faith in God, Country and family, and a desire to fly and fight again can and will enable survivors to endure the hardships of evading under winter conditions.

THE RAID ON TOYKO

TSgt (s) Richard Dickerson
27 OSS/INA Cannon AFB NM

The Raid on Tokyo is one of the most critical military operations in U.S. history. This article will break down the timeline of events and relate the stories of several of the raid participants. The information in this is not new. It has been published in books, shown in movies, and related first hand by the participants in hundreds of interviews ranging from WWII to current day. This is just to remind you how important psychological/morale operations can affect the national attitude of a country and have an effect on the outcome of war.

Dec 7, 1941: Japanese attack Pearl Harbor

Feb 1942: Doolittle outlines objectives of bombing mission

May 6, 1942: Surrender of the Philippines

May 6, 1942: Surrender of Wake Island (first loss of U.S. territory)

Mar 24, 1942: Japan. bombardment of Bataan began

Apr 9 – Admiral King surrendered Bataan (Largest U.S. Army ever to surrender)

Apr 18: Doolittle Raid (First Raid on Japanese mainland, first U.S. success of the war)

As you can see, starting with Pearl Harbor, the U.S. suffered setback after setback as the Japanese continued to advance through the pacific. The U.S. was in desperate need of a victory. President Roosevelt urged that the military find a way to bomb Japan. He sought the means to bring home to Japan some measure of the real meaning of war. Giving credit where credit is due, it was a Navy submarine officer, Captain Francis Low, who pitched the original thought of using bombers taking off of a Carrier, to an operations officer, Admiral King, while visiting Norfolk, Virginia. Admiral King selected Capt Donald Duncan, his air officer, to turn this idea into a plan. After 5 days of planning, Capt Duncan had completed his work. The plan called for a dramatic surprise attack on Japanese industrial sites by U.S. Army bombers, producing the retribution that Roosevelt and the country desired and maybe more importantly needed.

General Arnold selected Lieutenant Colonel James H. Doolittle, as the man who would marshal the aircraft and men for the mission. By age 45, "Jimmy" Doolittle had earned flying fame perhaps second only to that of Charles A. Lindbergh. A stunt flier, a test pilot and an Army Air Corps officer, Doolittle had always been entranced with planes--and with finding out how high, how fast and how well they could fly. If it had wings and looked like a plane, chances were good that Jimmy Doolittle either had flown or could fly it. Doolittle accepted the challenge without hesitation. Arnold made it clear, however, that it was Doolittle the planner he wanted for this job, not Doolittle the pilot. Jimmy was twenty years older than many of the new crop of fliers. And he had too much know-how, Arnold felt, to risk on a dangerous combat mission. If captured (quite possibly) he would have to much information about U.S. aircraft designs. Over General Arnold's wishes Doolittle wrote himself into the plan, he would fly the lead plane and illuminate Tokyo with incendiaries for the planes following.

The raid would be flown from an Aircraft carrier that would approach to within 400 – 500 miles of Japan. The planes would take-off, fly low-



Lt Col James H. Doolittle
"Master Of The Calculated Risk"

A B-25 takes off from the deck of the Hornet on its way to Tokyo. Photo courtesy of the National Archives



level, strike industrial and military targets and then of using bombers taking off of a Carrier, to an what? They could take-off from a Carrier but could not

land on one. Besides, after launching the bombers, the Carrier would have to turn and leave because of the threat from the Japanese navy. This was a one-way trip and all the crews knew it. The plan for them called to travel west to the Asian mainland and land in China. Russia would have been closer, but Soviet Premier Joseph Stalin denied the U.S. permission to land in Russia in fear of Japanese response. It wasn't until Aug 8, 1945, that the Soviet Union declared war on Japan and invaded Manchuria. Aug 14 saw the unconditional surrender of Japan and the 15th was declared Victory over Japan (VJ) day.

To protect the Carrier group, a plan was devised for if the Carrier was spotted by Japanese ships or aircraft while approaching.

First option was that the aircraft would immediately leave the decks. If they were within range of Tokyo, they would go ahead and bomb Tokyo, even though they would run out of gasoline shortly thereafter. If they were not in range of Tokyo, they would go back to Midway. If both destinations were out of range they would push the airplanes overboard so the decks could be cleared for the use of the carrier's own aircraft.

On the morning of April 18, 1942, the task force was sighted by Japanese patrol boats. The boats were quickly destroyed, but they could have transmitted a position report. It was eight hours before scheduled take-off, an **additional 400 miles** to the target. Gas reserves would be dangerous low, but they were spotted and they would have to go.

Minutes after noon, the sense of serenity enveloping the capital suddenly shattered. Here and there on the outskirts of Tokyo, dark-green planes appeared, flying so low that they almost touched the ground (in training for the mission, it was reported that you could see the B-

25s flying under telephone and electrical wires). People on beaches, or riding bicycles, or walking along roads paused to glance up at the fleeting shapes. Quite a few waved at the fast-moving, twin-engine aircrafts.

A French journalist rushed outside: "I heard a rugged, powerful sound of airplane engines. A raid at high noon! Explosions. I spotted a dark airplane traveling very fast, at rooftop level. So they've come!"

The actual damage done by the raid was minimal.

16 airplanes, each carrying one ton of bombs. In later raids, General LeMay with his 20th Air Force, sent out 500 planes on a mission, each carrying 10 tons of bombs. Even

though the damage to the targets was minimal, it did have a large outcome on the war. It forced the Japanese to keep fighter aircraft, Air Defense assets and the associated POL, manpower and supplies stationed on the mainland instead of being deployed to forward islands where they could have inflicted heavy damage to U.S. forces. The true pain had been psychological--a shattering blow to Japanese pride. Japan's army and navy had failed to shield the homeland. Even more unforgiving, they had not been

able to safeguard the emperor.

After the raid, reaching a safe haven wasn't easy. And because they had to take-off much sooner than planned, they were very low on fuel. One crew went to Vladivostok, the other 15 proceeded until they got to the coast of China. When they got to China, two of the B-25s were so low on fuel that they landed in the surf along side of the beach. Two people were drowned, eight made it ashore. On Aug 15, 1942, it was learned from the Swiss Consulate General in Shanghai that eight

North American B-25B "Mitchell"
USAF Museum



THE B-25 MITCHELL **SPECIFICATIONS**

Span: 67 ft. 7 in.

Length: 52 ft. 11 in.

Height: 15 ft. 9 in.

Weight: 28,460 lbs. loaded

Armament: Five .50-cal. machine guns;
5,000 lbs. of bombs

Engine: Two [Wright R-2600s](#) of 1,700 hp.
ea.

Cost: \$96,000

Serial Number: 43-3374 (B-25D)

Displayed as (S/N): 40-2344 (B-25B)

Maximum speed: 275 mph.

Cruising speed: 230 mph.

Range: 1,200 miles

Service Ceiling: 25,000 ft.

American flyers were prisoners of the Japanese at Police Headquarters in that city. On Oct 19, 1942, the Japanese broadcast that they had tried two crews of the Tokyo Raid and had sentenced them to death, but that a larger number of them had received commutation of their sentences to life imprisonment and a lesser number had been executed. No names or facts were given.

After the war, the facts were uncovered in a war crimes trial held at Shanghai, which opened in Feb 1946, to try four Japanese officers

for mistreatment of the eight POWs of the Tokyo Raid. The eight captured were Hallmark, Meder, Nielsen, Farrow, Hite, Barr, Spatz and DeShazer. In addition to being tortured, they contracted dysentery and beriberi as a result of the deplorable conditions under which they were confined.

On Aug 28, 1942, Hallmark, Farrow and Spatz were given a "trial" by Japanese officers, although they were never told the charges against them. On Oct 14, 1942, Hallmark, Farrow and Spatz were advised they were to be executed the next day. At 4:30 p.m. on Oct 15, 1942, the three Americans were brought by truck to Public Cemetery No. 1, outside

Shanghai. In accordance with proper ceremonial procedures of the Japanese military they were executed. They were placed on their knees, with their arms tied and blindfolded with black ink marks on the white cloth directly over the center of their foreheads. All three were shot simultaneously by three soldiers with rifles, and then promptly cremated.

The other five men remained in military confinement on a starvation diet, their health rapidly deteriorating. In Apr 1943, they were moved to Nanking and on Dec 1, 1943, Meder died. The other four men began to receive a slight improvement in their treatment. And by sheer determination and the comfort they received from a lone copy of the Bible, they survived to August 1945 when they were freed. The four Japanese officers tried for their war crimes against the eight Tokyo Raiders were found guilty.

Three were sentenced to hard labor for five years and the fourth to a nine-year sentence.

Now the Tokyo Raiders were caught in an inadvertent web of command intrigue. Marshall and Arnold, wary of security leaks, had given Chiang Kai-shek few details of the raid, and none at all to Colonel Claire Chennault, commander of the Flying Tigers. At the last possible moment they called upon General Joseph W. Stilwell, U.S. commander in the China-Burma-India theater, to get radio beacons to the five fields. The radio beacons would allow the B-25s to home-in on the signal and

land at the airfields for refueling. The plane dispatched to deliver the radio beacons crashed in a storm. There would be no radio signals to guide the Doolittle Raiders to safe landings. Chennault, years later, bitterly criticized the U.S. high command for not taking him into their confidence: "If I had been notified, a single Flying Tigers command ground radio station plugged into the East China net could have talked most of the Raiders into friendly fields."



**B-25s crowd the flight deck of USS Hornet (CV-8) on the way to Japan.
U.S. Navy Public Affairs Library**



Lt. Col. Jimmy Doolittle, accepts from the skipper of the Hornet, Capt. Marc A. Mitscher, a medal once given to a U.S. Navy officer by Japan. This medal was wired to a 500-lb. bomb for return to Japan "with interest." Photo courtesy of the USAF Museum at WP AFB, OH.

The Doolittle Raid consisted of 16 aircraft (B-25 Mithchels) and 80 men. Each of these men have a fascinating story of survival to tell which would fill pages, the following are just a few excerpts and a listing by crew of the men of the Doolittle raid.

Twenty-three-year-old Bill Farrow wrote, in part, to his mother in Darlington, South Carolina: "Just remember that God will make everything right and that I will see you again in the hereafter." To his father and mother in Robert Lee, Texas, Dean Hallmark said: "Try to stand up under this and pray. I don't know how to end this letter except by sending you all my love."

Twenty-one-year-old Harold Spatz wrote to his father in Lebo, Kansas: "I want you to know that I died fighting like a soldier. My clothes are all I have of any value. I give them to you. And Dad, I want you to know I love you. May God bless you." The captors told their captives that Japan was winning the war. The fliers would die in a Japanese prison. If, somehow, America won the war, they were to be beheaded.

The prisoners drifted into dream-states. They invented mind games. Nielsen "built" a house in his mind, brick by brick. Hite worked out plans for a farm. DeShazer wrote poems on an imaginary blackboard. Wracked by dysentery, Meder grew weaker. Then he contracted beriberi. During a rare exercise period, Meder asked Nielsen to pray for him.

On December 1, 1943, four of the five prisoners heard hammering. The next day, one at a time, they were escorted into Meder's cell. His body lay in a wooden coffin. A Bible was on the lid.

Amid the encircling gloom of their cells, the men tried to find inner light. Hite asked the chief guard for a Bible. "Each of us," he recalls, "read through the King James version. It was passed from one cell to the other. It kept our spirits alive."

Their cells were as ovens in summer, icy chambers in winter. Guards singled out Barr for vicious treatment. He was far taller than his captors and had bright red hair. In one horrifying episode, they forced him into a straightjacket, laced his arms behind his back, and thrust him facedown in snow for an hour. Barr screamed again and again.

Hite had fallen away to fewer than ninety pounds. He remembers, "I found my strength by calling on my Lord. Whosoever called upon the Lord, would be saved."

Nielsen thought about killing himself. But he made up his mind that if he did so he would first get hold of a guard's sword and make at least one captor die. "Faith kept me alive," Nielsen declares. "Faith in my nation. My religion. My Creator."

DeShazer became weak from dysentery. More than seventy boils covered his body. He would get on his knees, face the cell door, and repeat passages from the Bible.

From out of the depths, DeShazer searched for God. "The way the Japanese treated me," he reflects, "I had to turn to Christ. No matter what they did to me, I prayed. I prayed for the strength to live. And I prayed for the strength, somehow, to find forgiveness for what they were doing to me."

One season became another. By the summer of 1945, the prisoners seemed but shadows. One morning in August 1945, DeShazer experienced something like a vision. An interior voice urged him to pray, all that day, for an end to the war. And he did so, from seven that morning until two in the afternoon.



Lieutenant Colonel James H. Doolittle, USAAF, (center) with members of his flight crew and Chinese officials in China after the 18 April 1942 attack on Japan. Those present are (from left to right): Staff Sergeant Fred A. Braemer, Bombardier; Staff Sergeant Paul J. Leonard, Flight Engineer/Gunner; General Ho, director of the Branch Government of Western Chekiang Province; Lieutenant Richard E. Cole, Copilot; Lt.Col. Doolittle, Pilot and mission commander; Henry H. Shen, bank manager; Lieutenant Henry A. Potter, Navigator; Chao Foo Ki, secretary of the Western Chekiang Province Branch Government.

Takeoff No.1 (BAIL OUT)

Crew from 34th Squadron, 17th Group



**WWII POW being executed
by Japanese Guard.**

Pilot Lt. Col. James H. Doolittle

Co-pilot Lt. Richard E. Cole

Navigator Lt. Henry A. Potter

Bombardier Sgt. Fred A. Braemer

*Gunner Sgt. Paul J. Leonard (Killed in Africa Jan. 5, 1943)

Takeoff No.2 (CRASH LANDING - China)

Crew from 37th Squadron, 17th Group

Pilot Lt. Travis Hoover

Co-pilot Lt. William N. Fitzhugh

Navigator Lt. Carl R. Wildner

*Bombardier Lt. Richard E. Miller (Killed in Africa Jan. 22, 1943)

Gunner Sgt. Douglas V. Radney

Takeoff No.3 (BAIL, OUT)

Crew from 95th Squadron, 17th Group

*Pilot Lt. Robert M. Gray (Killed in crash en route to China from India Oct. 18, 1942)

*Co-pilot Lt. Jacob E. Manch (Killed bailing out of T-33, Las Vegas, Nevada, Mar. 24, 1958)

Navigator Lt. Charles J. Ozuk

Bombardier Sgt. Aden E. Jones

*Gunner Cpl. Leland D. Faktor (Killed bailing out in China after Tokyo Raid, April 18, 1942)

Takeoff No.4 (BAIL OUT)

Crew from 95th Squadron, 17th Group

Pilot Lt. Everett W. Holstrom

*Co-pilot Lt. Lucien N. Youngblood (Killed in crash Feb. 28, 1949)

Navigator Lt. Harry C. McCool

*Bombardier Sgt. Robert J. Stephens (Died April 13, 1959)

Gunner Cpl. Bert M. Jordan

Takeoff No.5 (BAIL OUT)

Crew from 95th Squadron, 17th Group

Pilot Capt. David M. Jones (P.O.W. Germany 2 1/2 years)

*Co-pilot Lt. Rodney R. Wilder (Died June 6, 1964)

*Navigator Lt. Eugene F. McGurl (Killed in crash after raid in Burma, June 8, 1942)

*Bombardier Lt. Denver V. Trulove (Killed in action in Sicily April 5, 1943)

Gunner Sgt. Joseph W. Manske

Takeoff No.6 (DITCHED OFF CHINA COAST)

Crew from 95th Squadron, 17th Group

*Pilot Lt. Dean E. Hallmark (Executed by Japanese Oct. 15, 1942)

*Co-pilot Lt. Robert J. Meder (Died in Japanese P.O.W. Camp Dec. 1, 1943)

Navigator Lt. Chase J. Nielsen (P.O.W. Japanese 3 1/2 years)

*Bombardier Sgt. William J. Dieter (Drowned after ditching following raid April 18, 1942)

*Gunner Sgt. Donald E. Fitzmaurice (Drowned after ditching following raid April 18, 1942)

Takeoff No.7 (CRASH LANDING CHINA COAST)

Crew from 95th Squadron, 17th Group

Pilot Lt. Ted W. Lawson

Co-pilot Lt. Dean Davenport

Navigator Lt. Charles L. McClure

*Bombardier Lt. Robert S. Clever (Killed in crash in U.S., Nov. 20, 1942)

Gunner Sgt. David J. Thatcher

Takeoff No.8 (LANDED IN RUSSIA) (INTERNEED)

Crew from 95th Squadron, 17th Group

Pilot Capt. Edward J. York

Co-pilot Lt. Robert G. Emmens

Navigator/Bombardier Lt. Nolan A. Herndon

Engineer S/Sgt. Theodore H. Laban
Gunner Sgt. David W. Pohl

Takeoff No. 9 (BAIL OUT)
Crew from 34th Squadron, 17th Group
Pilot Lt. Harold F. Watson
Co-pilot Lt. James N. Parker
Navigator Lt. Thomas C. Griffin (P.O.W. Germany 2 years)
Bombardier Sgt. Wayne M. Bissell
Gunner S/Sgt. Eldred V. Scott

Takeoff No.10 (BAIL OUT)
Crew from 89th Recon Squadron
Pilot Lt. Richard O. Joyce
Co-pilot Lt. J. Royden Stork
Navigator/Bombardier Lt. Horace E. Crouch
*Bombardier Sgt. George E. Larkin, Jr. (Killed in crash on flight to China from India Oct. 18, 1942)
Gunner S/Sgt. Edwin W. Horton, Jr.

Takeoff No.11 (BAIL OUT)
Crew from 89th Recon Squadron
*Pilot Capt. C. Ross Greening (P.O.W. Germany 2 years died March 29, 1957)
Co-pilot Lt. Kenneth E. Reddy (Killed in crash in U.S. Sept 3, 1942)
Navigator Lt. Frank A. Kappeler
Bombardier S/Sgt. William L. Birch
*Engineer Sgt. Melvin J. Gardner (Killed in crash in Burma June 3, 1942)

Takeoff No.12 (BAIL OUT)
Crew from 37th Squadron, 17th Group
Pilot Lt. William M. Bower
*Co-pilot Lt. Thadd H. Blanton (Died Sept. 26, 1961)
*Navigator Lt. William R. Pound (Died July 13, 1967)
Bombardier Sgt. Waldo J. Bither
*Gunner Sgt. Omer A. Duquette (Killed in crash in Burma June 3, 1942)

Takeoff No.13 (BAIL OUT)
Crew from 37th Squadron, 17th Group
Pilot Lt. Edgar E. McElroy
Co-pilot Lt. Richard A. Knobloch
Navigator Lt. Clayton J. Campbell
Bombardier Sgt. Robert C. Bourgeois
Gunner Sgt. Adam R. Williams

Takeoff No.14 (BAIL OUT)
Crew from 89th Recon. Squadron
Pilot Maj. John A. Hilger
Co-pilot Lt. Jack A. Sims
Navigator/Bombardier Lt. James H. Macia, Jr.
Engineer S/Sgt. Jacob Eierman
*Gunner Sgt. Edwin V. Bain (Killed in action off Rome Italy, July 19, 1943)



POW executed by Japanese soldiers during transportation phase of captivity.
Photo courtesy of the National Archives

Takeoff No.15 (CRASH LANDING - CHINA COAST)
Crew from 89th Recon. Squadron
*Pilot Lt. Donald G. Smith (Killed in crash in British Isles Nov. 12, 1942)
Co-pilot Lt. Griffith P. Williams (P.O.W. Germany 2 years)
Navigator/Bombardier Lt. Howard A. Sessler
Engineer Sgt. Edward J. Saylor
Gunner Lt. Thomas R. White (Medical Corps)

Takeoff No.16 (BAIL OUT)
Crew from 34th Squadron, 17th Group
*Pilot Lt. William G. Farrow (Executed by Japanese Oct. 15, 1942)
Co-pilot Lt. Robert L. Hite (Japanese P.O.W. 31/2 years)
Navigator Lt. George Barr (Japanese P.O.W. 31/2 years) (Died July 12, 1967)
Bombardier Cpl. Jacob D. DeShazer (Japanese P.O.W. 31/2 years)
*Engineer/Gunner Sgt. Harold A. Spatz (Executed by Japanese Oct. 15, 1942)

Survival School Academic Library

By Sue Arvin

336 TRSS/TSDD Fairchild AFB WA

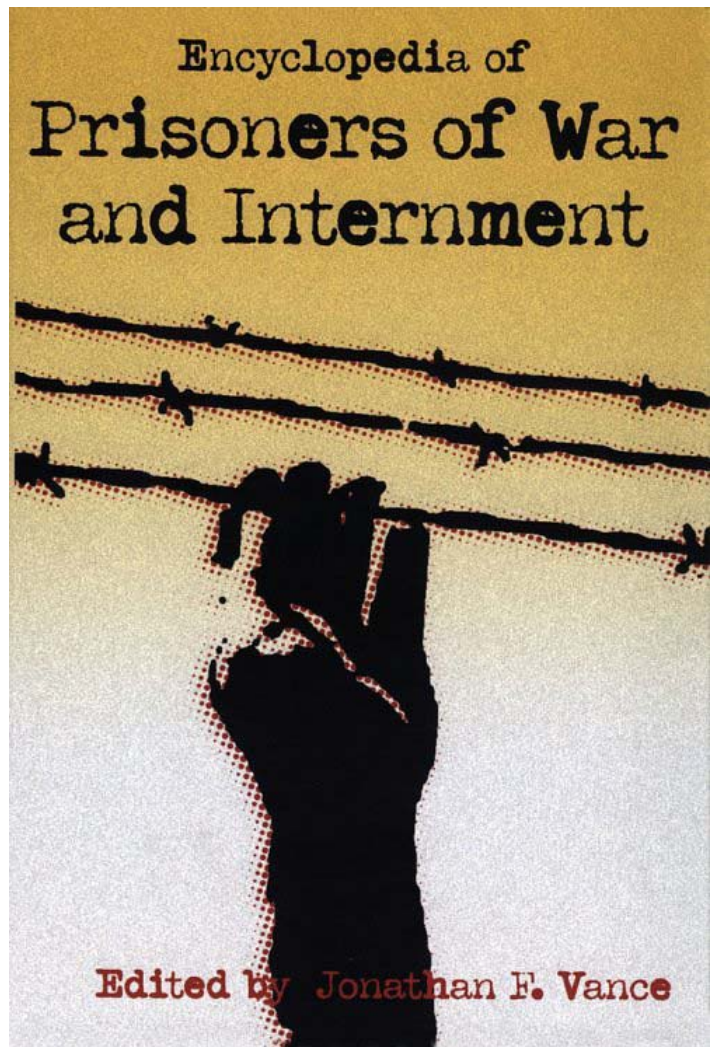
Encyclopedias, which treat comprehensively a particular branch of knowledge, are usually in articles arranged alphabetically, often by subject.
Check it out!

Encyclopedia of Guerrilla Warfare
edited by I.F.W. Beckett - Santa Barbara, CA. : ABC-CLIO, 1999.

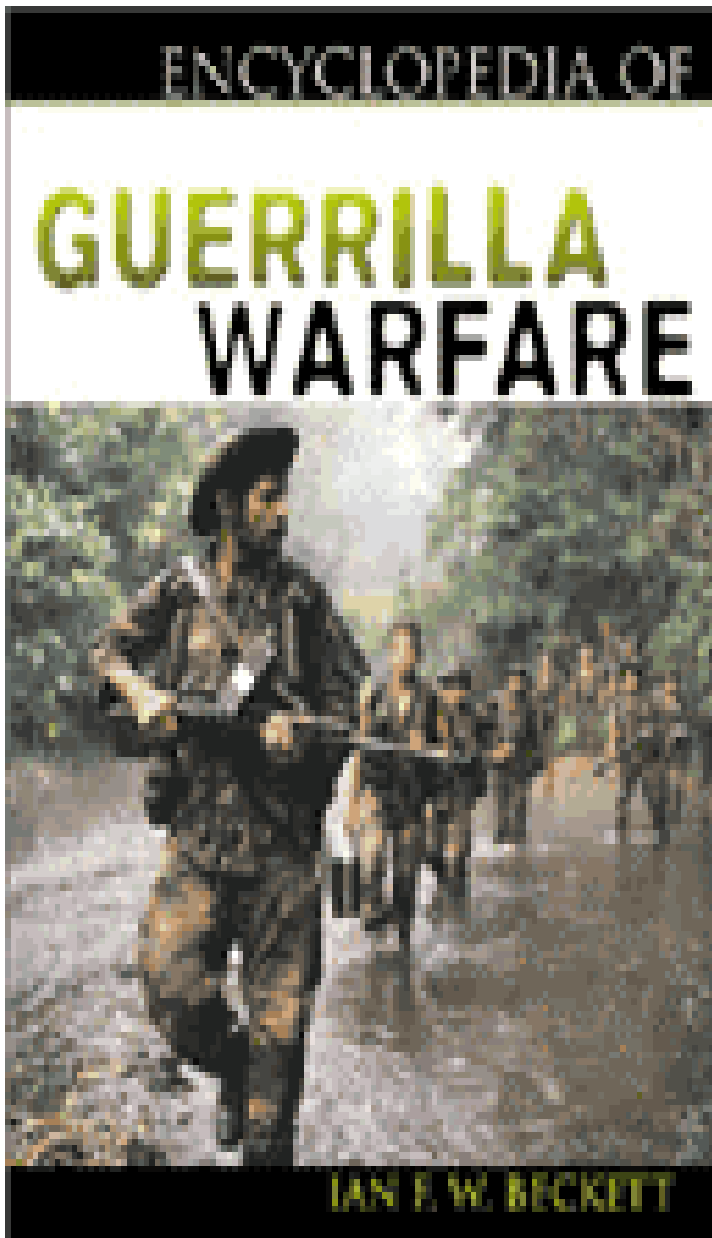
303 p. : Bib. Ind. ill.

ISBN/ISSN: 0874369290 or on the shelf at 355.425
BEC

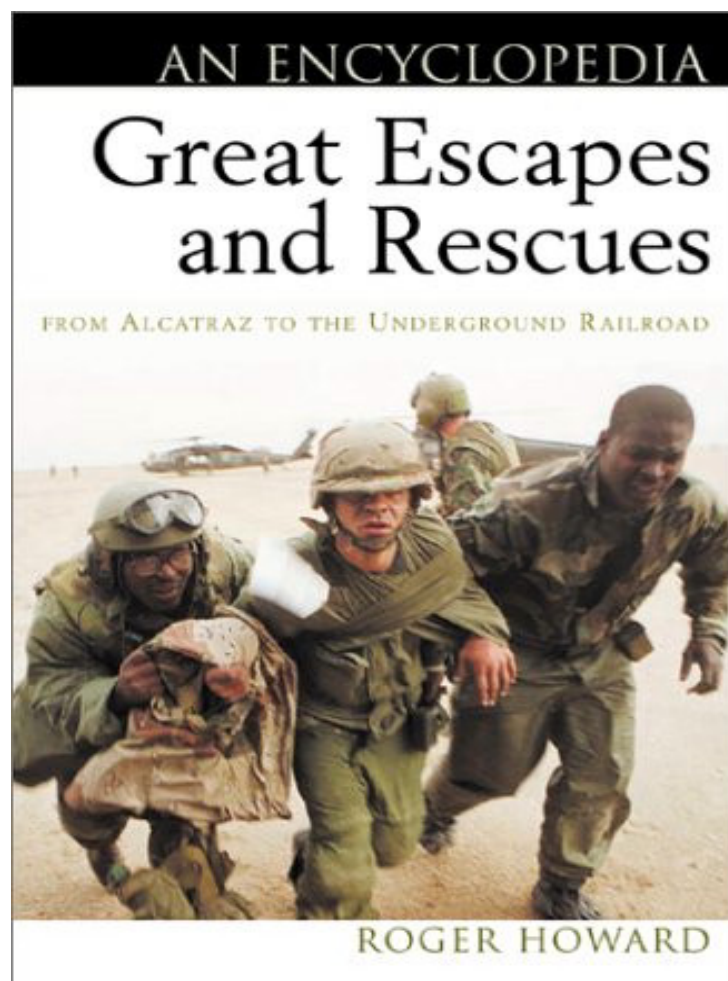
Summary: An encyclopedia of articles examining guerrilla warfare throughout the world, focusing on military tactics utilized by minority groups within a state or indigenous population to oppose the ruling government or foreign occupying forces. The coverage is truly all-encompassing, from the Peninsular War against Napoleon (where the term *guerrilla* originated) to the Maori wars in New Zealand in the nineteenth century and from an uprising in Soviet Central Asia after the 1918 revolution to Cyprus after World War II. In addition to individual wars and campaigns, entries



include individuals (George Armstrong Custer, Ernesto Che Guevara), groups (*Italian army, Kuomintang, Tamils*), locations (*Ho Chi Minh Trail, Nicaragua*), and terms (*foco*, the strategy that brought Fidel Castro to power in Cuba). Biographical entries include known theorists and leaders and the lesser known, for example, the developer of Soviet counterinsurgency (Mikhail Nikolaievich Tukhachevsky) and the leader of the Angolan independence movement (Dr. Agostinho Antonio Neto).



Encyclopedia of Prisoners of War and Internment
 edited by Jonathan F. Vance. – Santa Barbara, CA. :
 ABC-CLIO, 2000.
 408 p. : Bib. Ind. ill.
 ISBN/ISSN: 1576070689 or on the shelf at 355.113
 VAN



Summary: This A-to-Z reference work of nearly 300 entries surveys the history of prisoners of war and interned civilians from the earliest times to the present, with emphasis on the nineteenth and twentieth centuries. Explores such themes as famous prisoners of war throughout history, medical conditions, atrocities, escapes, international law, exchanges of prisoners, organizations working on behalf of POWs, and trails associated with the treatment of captives.

Great Escapes and Rescues: An Encyclopedia
 edited by Roger Howard. - Santa Barbara, CA. : ABC-CLIO, 1999.

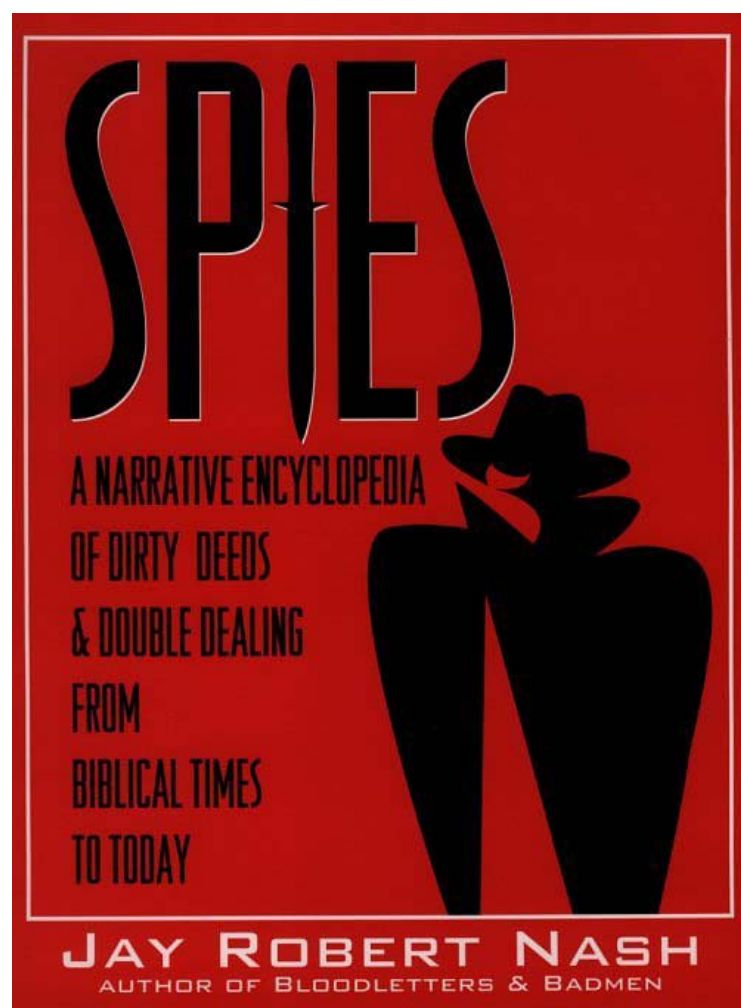
256 p. : Bib. Ind. ill.
 ISBN/ISSN: 1576070328 or on the shelf at 355.126
 HOW

Summary: In this encyclopedia, disguises, ruses, stratagems, capers, devices, rescues, and plots abound, from a papier-mâché POW substitutes to Israeli commandos who undertook a remarkable rescue operation in Entebbe, Uganda. Each story is a tribute to humankind's ingenuity, perseverance, courage and indomitable will.

Spies: A Narrative Encyclopedia of Dirty Deeds & Double dealing from Biblical Times to Today
 edited by Jay R. Nash. - New York, NY. : M. Evans, 1997.

624 p.: Bib. Ind. ill.
 ISBN/ISSN: 0871317907 or on the shelf at 327.1203
 NAS

Summary: Stories of hundreds of patriots, turncoats, sell-outs, and heroes; men and women whose exploits have often gone unnoticed, yet whose influence on the outcome of great events has frequently created a turning point.



CLEAN WATER: WHEN PILLS AND FILTERS ARE NOT AVAILABLE

By Allen Erickson

You can **filter** the water by slowly pouring it through a couple of layers of cloth or by constructing a more intricate filter resembling a large sock filled with alternating layers of sand, grass, fine gravel, and charcoal, if available. This will make the water look and smell clean, but it still needs purification. Water should go through the layers, not down the sides.

The smell and taste of water can be improved by letting it sit in **direct sunlight** in a clear water bag or in a depression on a waterproof surface. This will kill some bacteria. Afterward, **USE AERATION** - pour the water back and forth between two containers to aerate it. **Boiling** for 10 minutes kills most harmful organisms,

but it is impractical for the volume needed in the evasion environment. If a fire is built, boil water to extend your chemical resources. **Disease might harm or kill you; dehydration will certainly kill.** If purification is impossible, you still need water, so try to select the cleanest looking source. **Filter, sun and aerate the water to kill or remove as many harmful organisms as possible.**



As an absolute last resort, drink the water - otherwise dehydration might kill you in three or four days. An evader needs all his wits to avoid the enemy; without water, you are mentally impaired after one day. Parasites might not bother you for weeks or months, if at all.

IMPROVISED WATER PURIFICATION

IODINE - 12 DROPS PER
GALLON - 3 DROPS PER QT -
DOUBLE IF CLOUDY

BLEACH - 8 DROPS PER GALLON - 2
DROPS PER QT - DOUBLE IF CLOUDY
(HYPOCHLORITE)

Parody of Kipling's "If"

Found in MI-9's E&E Files

If you can quit the compound undetected,
And clear your tracks, nor leave the smallest trace,
And carry out the programme you've selected,
Nor lose your grasp of distance, time and space ...

If you can walk at night by compass bearing,
Or move discreetly in the light of day,
And temper your elusiveness with daring,
Trusting that sometimes bluff will find a way ...

If you can swallow sudden sour frustration,
And gaze unmoved at failure's ugly shape,
Remembering for further inspiration
It is your constant duty to escape ...

If you can keep the little bastards guessing
With explanations only partly true,

And leave them in their heart of hearts confessing
They didn't get the whole truth out of you

If you can have the patience to
think clearly
Of planning methods wiser than
before,
And treat your past
miscalculations merely
As hints let fall by Fate to teach
you more ...

If you can scheme with patience
and precision
(It wasn't in a day they builded
Rome)
And make escape your single
sole ambition
The next time you attempt it -
you'll get home!

Survivor's Quote

**"Escape by God!
Never mind
hunger pains,
discomfort or any
other agony. Let
escape become
your passion,
your one and only
obsession until
you reach home."
Wing Commander
Douglas Bader
POW/Escapee
during WWII
A Prisoner's Duty**

Survival Tips

SURVIVOR Staff

AIR BATH

How do you get clean or at least feel cleaner when water is in short supply? Try air bathing yourself and your clothing.

To air bathe all you have to do is remove your clothing and then expose your body to the air. Exposure to sunshine is ideal, but even on an overcast day exposing your skin to fresh air will help refresh and revitalize your body in addition to help fighting off infection. Even if the situation you are in does not allow you to sit outside, exposure inside your shelter will be somewhat helpful. Be careful to avoid cold or heat related injuries. I mean why complicate your life by having to explain why/how you got sunburn on parts of your body not normally exposed.

Air bathing is not only good for you, but should be done to your clothing if the situation allows. Shake out your clothing and expose it to sunlight to help clean and kill off germs. This will also help to reduce odor and may add to the comfort of placing on the same clothing you have worn for a while. In the cases where exposing your clothing to sunlight is impossible, try the same air exposure techniques on your clothing that we talked about on your body above.

If the situation allows taking steps to enhance your personal cleanliness will help protect you against infection and illness, it can also help prevent the spread of these to others in your group. Even reducing any odors may make you a much more popular member of the group.

LIGHTER SURVIVAL KIT

Instead of throwing out that empty disposable lighter turn it into a minimum survival kit. Take an empty disposable lighter, one that still creates a spark, but no flame, and cut the bottom from it. Once the bottom is removed you have a storage space. With some of the lighters this storage space is divided in half. Depending on what you want inside of this storage space removal of this divider may need to occur (needle nose pliers works best). This empty space becomes your storage space for your survival items. While the space is small it does

allow you to pack some basic items in it. Some examples are cotton and Vaseline tinder, trick birthday candles (the kind that re-light after being blown out), threaded needles, band-aids, fishing items and wire or what ever you decide to put in it. The bottom of the disposable lighter can then be duck taped shut. This way you have a kit with a durable flint and steel sparking/fire starting devise built-in and a water resistant container. When using the sparking devise on tinder, it may work better if you can remove the metal plate in front of the lighter (this usually acts as a wind protector). That way your spark is closer to your tinder.

WATERPROOF MATCHES AND TINDER

Unroll 2" to 4" wide gauze bandage. Fold layers of the gauze on top of each other until you get the desired length. Place wooden strike-anywhere matches on top of the strip of folded gauze. Roll the matches and gauze up into a tight bundle. Once rolled up, all you should see is the gauze with none of the matches exposed. Tie the small bundle with twine, string, strip of cloth or an old shoelace (something that burns is best). Leave additional

line so you can lower the bundle into some melted paraffin wax. Dip the entire bundle into melted paraffin wax allowing the wax to soak into the gauze. The wax will cover the wooden matches making them water proof, as well as create a water resistant wax covering out of the gauze.



When you need to start a fire, unroll and cut a small piece of the wax gauze that can be used as a tinder. When you unroll the gauze, it will also expose the waterproof matches, remove what you think you need to get a fire started. Before using the matches scrape the wax off the head and then light away.

BIRDS AS WATER INDICATORS

Pigeons and doves can be found in every hot desert of the world. Most have an evening habit of perching in trees and shrubs near water holes. Doves and pigeons will sometimes drink at daybreak, rarely do they drink during the heat of the day, but they almost always will drink in the early evening. Therefore it is very important to watch for the direction of the flight of birds in the evening. Additionally, if you are close enough to hear and see the birds, their flight from water is characteristically heavier then normal with their wings making a louder flapping sound.